IN THE CLAIMS

Claim 1. (Currently Amended) A method of determining ~~protection transmission unit~~ timeslot allocations on a protection path for traffic flows ~~of working traffic being carried~~ on a working path ~~through a communication network~~ upon occurrence of failure on the working path ~~that would require at least some of the flows of working traffic to be carried on a protection path on the communication network, by nodes on the protection path~~, the working path and protection path extending through a common set of nodes in a communication network and ~~being formed to collectively~~ implementing a protection cycle on the communication network, the method comprising the steps of:

distributing connection information associated with the traffic flows ~~of working traffic being carried~~ on the working path ~~that are to be protected by the protection path~~ to all nodes on the protection path before occurrence of a failure on the working path; and

upon occurrence of a failure on the working path, individually determining, by each node on the protection path, which traffic flows ~~of working traffic~~ on the working path are affected by the failure on the working path and therefore will be carried on the protection path, and the timeslot allocations on the protection path of the affected traffic flows at that node based on the connection information associated with the affected traffic flows; ~~and~~

~~individually determining, by each node on the protection path, protection transmission unit allocations at that node for the flows of working traffic affected by the failure on the working path, from the connection information associated with the affected flows~~ wherein the traffic flows are carried in timeslots on the working path and the protection path, and wherein each individual traffic flow occupies one or more timeslot on the working path or on the protection path.

Claim 2. (Previously Presented) The method of claim 1, wherein the connection information comprises AZ information, where A represents the location where the flow enters the protection cycle and Z represents the location where the flow leaves the protection cycle.

Claim 3. (Original) The method of claim 2, wherein the connection information further comprises connection ID information.

Claim 4. (Previously Presented) The method of claim 1, wherein the protection cycle is a ring on the communication network.

Claim 5. (Currently Amended) The method of claim 4, wherein the step of determining the ~~protection transmission unit allocation~~ timeslot on the protection path is performed only after receipt of notice of the failure on the ring.

Claim 6. (Canceled)

Claim 7. (Currently Amended) The method of claim 1, wherein the communication network is based on an optical transport technology which divides a total capacity of a link into time slots, ~~and wherein the step of determining a protection transmission unit allocation comprises determining transmission time slots for the flows according to the connection information associated with the affected flows~~.

Claim 8-10. (Canceled)

Claim 11. (Previously Presented) The method of claim 1, wherein the protection cycle is a ring, wherein the nodes are nodes on the ring, and wherein the connections are connections that are provisioned through at least two nodes on the ring.

Claim 12. (Currently Amended) The method of claim 1, wherein the communication network is at least one of a SONET and SDH based network, wherein the protection cycle is at least one of a SONET ring and an SDH ring, and wherein the ~~protection transmission unit allocation~~ timeslot allocation on the protection path is a time slot on the SONET ring or SDH ring.

Claim 13. (Canceled)

Claim 14. (Currently Amended) The method of claim 1 ~~claim 13~~, wherein the protection cycle has two working paths and two protection paths, wherein time slot interchange is permitted on each of the working paths, and wherein time slots are allocated on each of the protection paths.

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Claim 15. (Previously Presented) The method of claim 14, wherein extra traffic may be carried on each of the protection paths, and wherein time slot interchange is permitted for the extra traffic on each of the protection paths.

Claim 16. (Previously Presented) The method of claim 1, wherein the communication network is a mesh network, wherein the protection path of the protection cycle is a logical restoration path on the mesh network.

Claims 17-19. (Canceled)

Claim 20. (Previously Presented) The node of claim 1, wherein the connection information further comprises connection size information associated with the connections.

Claim 21. (New) A method comprising the steps of:

distributing connection information associated with flows of working traffic being carried on a working path of a protection cycle in a communication network to all nodes on the protection cycle before occurrence of a failure on the working path, the protection cycle including the nodes, the working path passing through the nodes, and a protection path passing through the nodes;

upon occurrence of a failure on the working path that would require at least some of the flows of working traffic to be carried on the protection path, individually determining, by each node on the protection cycle, which flows of working traffic are affected by the failure and thus will be carried on the protection path; and

individually determining, by each node on the protection cycle, protection transmission unit allocations at that node for the flows of traffic being carried on the protection path, from the connection information associated with those flows.